Society Reports.

NEW YORK NEUROLOGICAL SOCIETY.

Stated Meeting, January 5, 1897. B. Sachs, M. D., President.

ACUTE POLIOMYELITIS WITH INVOLVEMENT OF THE SEVENTH NERVE.

Dr. Terriberry presented a child, twenty months old, exhibiting this condition. This was the second one, and was born of healthy parents after a normal gestation and confinement. It was breast-fed and developed normally. It walked without support at the age of seventeen months. It had never received any injury. On November 30, 1896, the child was noticed to be restless and irritable, and the following morning there was high fever with constant nausea and a profound prostration of the muscular system. The child appeared to be entirely free from pain and tenderness. When it was held up, the head fell on the left shoulder. Twenty-four hours later the condition was not so severe. At this time the right side of the face was noticed to be unnatural, the eye being constantly open. It was not until the sixth day that the child was able to balance itself on its feet. He had first seen the child ten days after the onset of the attack. Examination then showed complete Bell's paralysis on the right side of the face. The right foot pointed outward and there was a slight limp on this side. The knee-jerks were about normal. The galvanic current that could be tolerated produced good reaction on the unaffected side, but on the right side there was very slight reaction and the formula was normal. Since that time the galvanic current had been applied two or three times a week. At the present time the eye was better and the limp was scarcely noticeable. There was slight flabbiness of all the muscles on the right side. The clinical picture presented by this case was quite typical of an acute poliomyelitis.

Dr. Joseph Collins thought it was rather hazardous to make a diagnosis of anterior poliomyelitis in an infant who a month ago had the beginning of such a destructive lesion. A much more probable interpretation would be an infection of the central nervous system, manifesting itself not only in the spinal cord, but in other parts of the nervous system, this infection not being sufficient to cause death of the ganglion cells. A fully developed anterior poliomyelitis was not compatible with the degree of improvement exhibited in this case.

Dr. William B. Noyes called attention to a class of cases which had been very prevalent this fall, beginning with symptoms almost exactly like poliomyelitis and characterized by unusually marked sensory disturbances and recovering after three or four weeks. He could recall seeing since September about six such cases at the Vanderbilt clinic. In these, the peripheral nerves were sometimes affected at the same time as the spinal cord. This would, perhaps, offer an explanation of the case just presented.

Dr. Terriberry said that in a neuritis of a mixed nerve one expected to find some sensory disturbance. There was entire absence of sensory disturbance in the case presented. He knew of no category in which the case could be placed except in that given—anterior poliomyelitis. The theory, of course, mentioned by Dr. Collins we all recognized. Owing to the clinical features of the case he thought he was justified in so classifying it.

Dr. Collins said that he should classify the case as a bulbar myelitis. He believed pathologists stated now that the entire gray matter might be affected at the same time. It appeared to him to be a step backward to look upon the case as one of anterior poliomyelitis with bulbar involvement.

GRAVES' DISEASE WITH ŒDEMA OF THE EYELIDS.

Dr. Scratchley, on behalf of Dr. Bishop, presented a lady suffering from Graves' disease. This condition had lasted for four years and a half. The case was presented because of the œdema of the eyes, which had become much more manifest during the past few weeks. Various methods of treatment had been tried, but the best results had followed the use of belladonna.

Dr. J. Arthur Booth said that the kind of œdema found in this case was not uncommon when the eyes were very prominent. In the case which he had reported previously there had been marked œdema without prominence of the eyes. At the present time he was experimenting with thymus extract in these cases.

COMPRESSION PARAPLEGIA IN POTT'S DISEASE OF THE SPINE, BASED UPON STATISTICS.

Dr. V. P. Gibney read a paper with this title (see this journal, page 195).

Dr. Newton M. Shaffer presented a paper entitled

A CONSIDERATION OF THE PARAPLEGIA OF POTT'S DISEASE WITH ESPECIAL REFERENCE TO THE RESULTS OF MECHANICAL TREATMENT.

(See page 210).

Dr. De Forrest Willard, of Philadelphia, presented skiagraphs of two cases now under his care and read a paper entitled

LAMINECTOMY IN SPINAL CARIES PARAPLEGIA.

(See page 223).

Dr. Robert Abbe said he had felt for a long time that the cases upon which the surgeon should operate were those which the orthopedic surgeon gave up, and these were very few. The surgeon was reluctant to operate because of the danger of disseminating tuberculosis by the operation. He firmly believed that if Nature had an opportunity she would surround the tubercle bacilli with a fibrous barrier which would localize the disease and prevent general infection. This doctrine of avoiding resection of tubercular parts applied with especial force to the spine. Simple laminectomy was not especially difficult, although it was followed by great shock. He believed that the U-shaped incision and the free division of the muscles were responsible for much of the hemorrhage and shock. By simply incising along side of the spine down to the laminæ no muscles were cut through. The muscles are scraped away from one side, and the laminæ with attached muscles are drawn to one side. The laminæ could then be divided without undue hemorrhage. By this method the operation was extremely safe. If there were much handling of the cord undoubtedly there would be great shock. By picking up the dura he had been able to roll the cord to one side, so that he could inspect its anterior surface without producing shock. There was, of course, much unavoidable manipulation if one would thoroughly remove the disease and cure the patient. The laminæ are not at all necessary to the support of the spine, but they may be missed if the bodies of the vertebræ are extensively destroyed. Even after primary union, a sinus is apt to form after a short time, owing to imperfect removal of the disease, and this sinus interferes with mechanical appliances.

Dr. Joseph Collins said that he had been taught that one of the most important diagnostic signs of compression paraplegia was an increase of the reflexes, and, although he believed that this was the rule, yet in his own experience there was a number of cases with absence of the knee-jerk and without ankle clonus. He had, with Dr. Fraenkel, seen no less than seven cases, at least three of which were cases of Pott's, in which these conditons were noted. This condition of the reflexes is not easily explained, but it seemed to the speaker that the theory propounded by Bastian in 1879 and since elaborated by him, allowed of a more satisfactory interpretation than did any other explanation that had been suggested. In fact, the theory founded on the cut off influence existing between the reflex arc and the cerebellum seemed to have the greatest support, but he thought that it would yet be found that the condition of the reflexes in transverse lesions of the cord would be just in proportion as the columns of Gowers were affected or spared. The report just made by Dr. Gibney of nearly 50 per cent. of recoveries should be sufficient evidence to convince any one that there is very little justification in subjecting a patient to an operation that is so hazardous as Dr. Willard has told us laminectomy is. The degree of deformity he had found to bear very little relation to the extent of paralysis. He recalled a case in which there was no evidence of disease of the spine from ocular or manual examination, yet the paralysis was very great. He had observed absence of menstruation in one case and recalled that he had spoken of this case before the Orthopedic Section two years before. Iodide of potassium he believed was useful in these cases, yet the use of this remedy, to the exclusion of mechanical treatment was to be deplored.

Dr. M. Allen Starr said that from experience with operations on the spinal cord for other conditions, he thought we should be very cautious about meddling with the cord, and that if the cord had been once damaged it was practically useless to place it in a favorable condition for recovery, as it did not seem to have the power of regeneration. He had been surprised at the remarkable improvement that had occurred in cases of almost total paraplegia as a result of careful mechanical treatment. It should make us careful in the prognosis given in all cases of compression paraplegia. It was very rare for him to see a case in which the tendon reflexes were not very markedly exaggerated, so that his experience did not at all coincide with that of Dr. Collins. The majority of observers, he believed, still continued to find the knee-jerks exaggerated and clonus present when the cord was compressed above the mid-dorsal region.

Dr. C. A. Herter said that the pathological conditions underlying the desperate cases of compression myelitis were such as to give very little hope of anything more than the most temporary relief from operation. At the same time, he would regret exceedingly if all the surgeons took the stand taken by Dr. Abbe, for there was now enough reliable evidence to justify the continuance of this operation in the very severe cases. He had not met with loss of tendon reflexes in compression myelitis where the lesion was below the mid-dorsal region. He had only observed alternation of increased reflexes and loss of reflexes in cerebellar disease and in some cases of meningitis. The term "compression myelitis" seemed to him perfectly proper, as describing an effort at repair on the part of the cord. In his experience the compression had been due rather to the accumulation of broken-down tuberculous material outside of the dura than to the bone itself. The softening of the bone appeared to be due to tubercular disease of the vessels, similar to that found in patches of syphilis of the cord.

Dr. Edward D. Fisher said that he agreed with those who recognized exaggeration of the reflexes as a symptom of approaching compression paraplegia. Occasional variations should be looked upon merely as individual peculiarities. It was generally conceded that the cause of the compression was the infiltration between the bone and the dura, and hence it seemed to him that there was some indication for an operation if this material were not absorbed after a reasonable time. The question of operation should be decided by the condition of the patient rather than by the length of time the paralysis had lasted—in other words, by the acuteness of the process. He did not think the shock following the operation was due to the handling of the cord as much as to the excessive hemorrhage. The cord could be handled without giving rise to immediate shock, and it was difficult to see why shock should follow handling the cord in the lower dorsal region. In a large number of cases it was the surgeon's duty to operate.

The President said that the question of operation came up only in desperate cases, and in those in which there was a great probability that the paralysis would continue for the remainder of the patient's lifetime. It had been intimated that this was a condition which did not ordinarily tend to a fatal termination, but, in his opinion, a very considerable proportion did die from the disease. It was, therefore, the duty of the surgeon to make the percentage of recoveries as large as possible. He believed, with Dr. Abbé, that the question of shock was largely one of hemorrhage, and hence was probably preventable by improved technique. Certainly the question of shock in cranial surgery was chiefly one of hemorrhage. It was the duty of the neurologist to determine at what time the operation should be done. Where bone disease threatened extensive involvement of the spinal cord the operation would hardly be indicated, because the spinal cord would have been already damaged beyond repair. For this reason, if the neurologist had reason to believe that the cord was liable to be extensively destroyed, he should advise operation at once. He recalled a case of Pott's disease in which the first symptom was a peculiar sensory disturbance, which preceded the kyphosis by a number of months. Again, the symptoms often point to a compression of the lateral and posterior portions of the cord. It would seem that the performance of laminectomy at this period might avert further destruction of the cord. He had not seen a single case of Pott's disease in which the knee-jerks were lost; on the other hand, he had uniformly found a marked exaggeration of the reflexes.

Dr. Shaffer, in closing the discussion, said that out of his forty cases there were only four that did not show some indication of recovery and the great majority of cases recovered within one year. He, therefore, believed that the prospects of mechanical treatment were much greater than could be held out by any other method of treatment.

DIE DIFFERENTIALDIAGNOSE DES HIRNABSCESSES. [The Differential Diagnosis of Cerebral Abscess.] Berliner klinische Wochenschrift, Nos. 45 and 46. By H. Oppenheim.

The diagnosis of cerebral abscess is not always easy. One may be called upon to decide between abscess and meningitis due to trauma. The cerebral hemorrhage, which does not develop until some time after an injury (Bollinger), may present many similar symptoms. Trauma, or erysipelas resulting from a wound of the head, may cause non-purulent encephalitis, but they may also cause abscess. Functional neurosis may give rise to many difficult questions. While the symptoms of irritation and paralysis in these neuroses are usually found on the same side of the body as the cranial lesion, abscess, produced in the opposite cerebral hemisphere by *contre-coup,* may give rise to a similar location of symptoms. Friedmann has found that certain changes in the smaller cerebral vessals may cause symptoms, developing after trauma, which closely resemble those produced by abscess. There are a few cases of so-called abscess in which no organic changes have been found. Circumscribed purulent meningitis may clinically resemble cerebral abscess, and in some cases may be associated with it. Meningitis resulting from otitis may be limited to the spinal membranes. Fever is not always observed in cerebral abscess; slight and temporary elevations of temperature are not infrequent, but continuous and high fever renders the diagnosis of uncomplicated abscess improbable.

The slowing of the pulse is one of the most valuable diagnostic signs of abscess. Lumbar puncture is dangerous in a case of suspected abscess, as the sudden diminution of pressure may cause discharge of the pus. Uncomplicated otitis may stimulate cerebral abscess. Peptonuria may be found in encephalitis as well as in abscess. SPILLER.